

## Studying the Impact of Composition of Personal Empowerment on Beneficiaries of Microcredit

Sana Fayyaz<sup>1</sup>, Taseer Salahuddin<sup>2</sup>, Ismat Nasim<sup>3</sup> and Alia Ahmed<sup>4</sup>

### Abstract

*The current study aimed to study the impact of dimensions of personal empowerment and microcredit upon the worth of life of women borrowers. This research originated to unlock the potential of a dimension of personal empowerment by way of social political and cultural awareness and has a significant role in improving the quality of life of women. While its dimension of freedom of movement found insignificant due to the prevailed strict patriarchal system, whereas substantial outcomes in respect of contrary to economic decision making illustrated the rigid socio-cultural norms of Pakistan. Therefore, for the sake of strengthening the business purpose, it is necessary that stepping the freedom of movement that leads to the quality of life of women.*

**Keywords:** Dimensions of Personal Empowerment, Economic Decision Making, Freedom of Movement, Social-political and Cultural Awareness, Women, Quality of Life

**JEL Classification:** D14, G21, G41, G51, R51,

### 1. Introduction

The quality of life is rapidly gaining global attention due to poverty that almost engulfs developing countries today. According to the World Bank, the high and low quality of life is attributed to the income of individuals in society. The income of the household determines the quality of life where the lower the income of the

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<sup>1</sup>Assistant Professor at National College of Business Administration and Economics, Bahawalpur, Pakistan. Email: sana\_fayyaz2003@yahoo.com

<sup>2</sup>Director Research /Assistant Professor at National College of Business Administration and Economics, Bahawalpur, Pakistan.  
Email: salahuddin.taseer@gmail.com

<sup>3</sup>Lecturer, Department of Economics, Government Sadiq College Women University, Bahawalpur, Pakistan.

Email: ismat.nasim@gscwu.edu.pk (Corresponding Author)

<sup>4</sup>Dean Business School, National College of Business Administration, Lahore, Pakistan. Email: dralia@ncbae.edu.pk

household the lower the quality of life as asserted by the report from the World Bank (World Bank, 2015).

Moreover, microcredit lifts individuals out of poverty in developing economies, particularly in provincial ranges, because in underdeveloped countries, in conventional banking, cash is not used for poor people. So, the microcredit services fulfill the requirements of the poor to help them to escape from their poverty and have a good quality of life. Traditionally, females are financially dependent on males. Feigenberg, Field, & Pande, 2010 and Yasmeen & Karim, 2014 believe that financial independence in women leads to improved life quality due to financial freedom.

Therefore, there is a need to reduce income and financial inequality between two genders in the developing world especially. On the whole, women's function is as imperative as a man's position in giving power to the family and the growth of the nation. Apart from this, women are also eligible for equal privileges and benefits as their partners; nevertheless, the developing countries present a different situation. There is an inborn difficulty that stops women from contributing to the decision- making process and thus, denies them a good quality of life (Rehman, 2007). Several empirical studies have been carried out to assess the key determinants that explain the quality of life in a given scenario, but they have not obtained consonance in their results. Many researchers revealed significant relationships with certain determinants such as training, amount and period of loan with the life quality in the case of developing nations (Subramaniam, Maaniam, & Ali, 2013; Ali, Ali, & Suubhan, 2015).

Moyle, Dollard, and Biswas (2006) claimed that personal empowerment impacts the wellbeing of rural women (Moore, 2001; Lyons, Smots & Stephens, 2001). Afza and Rashid's (2009) findings critically argued that on remote women entrepreneurs by using the baseline survey from selected cities, across four provinces of Pakistan. The study debated women were not only deprived of financial resources but also lack access to basic needs such as education, health, clean drinking water, and proper sanitation".

Thus, microcredit improves the satisfaction in the life of women as above-mentioned support of previous researches, but perhaps might be strict socio-cultural conditions, the rigid political state of affairs; self -created critical norms have a bitter impact on women borrower's quality of life. To unlock the microcredit strategies there is a necessity of a key of personal empowerment that leads to a

quick revival of the economy to increase the quality of life of women. Therefore, in the present situation, there is a great need to break this unsophisticated socio-cultural condition. Henceforward, there are no worldwide determinants of personal empowerment. By adapting the light of the reviewing of the previous researches such as (Yasmeen & Karim, 2014; Vaessen, Rivas, Duvendack, Palmer, Leeuw, Van and Waddington, 2014; Nabahat, 2014; Nessa, 2011; Pitt, Kandker & Cartwright, 2006; Cheung, Mok, and Cheung, 2005), this current scholarship had adapted the three dimensions of personal empowerment i.e. women economic decision making, women's freedom of movement and women's political socio-cultural awareness.

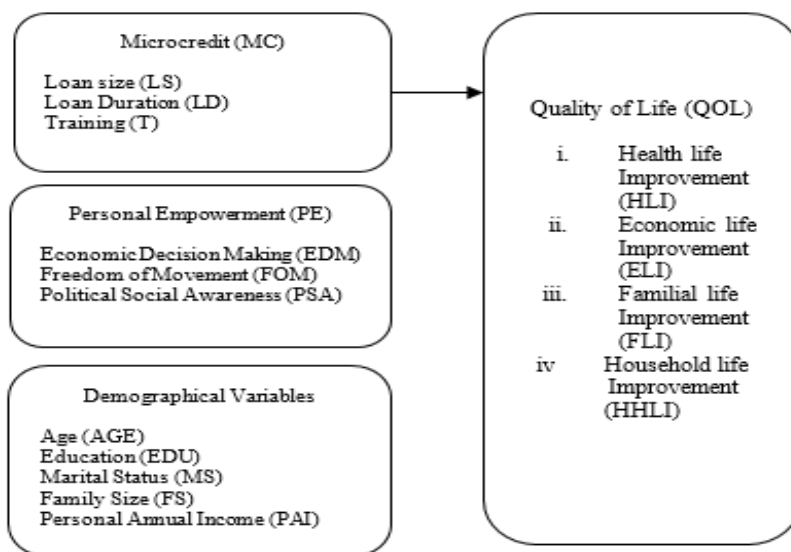
## **2. Research Design and Methodology for Research Framework**

The selection of research design has been highly dependent on the availability of existing constructs or variables. If the variables had been widely used in a variety of contexts, specifically in social sciences research, these would confirm the validity and reliability of measurements as previously tested by other researchers.

Because of the above discussion, the research framework of our study is pictured in figure 1.1.

**Figure 1.1**

***Research Framework of Women Borrowers' Life quality***



Above mentioned agenda discusses the variables selected in the study. In this study, the dependent variable is the life quality of microcredit female beneficiaries, whereas microcredit and scopes of personal empowerment are independent variables. Whereas the quality of life refers to a person's perception of his position in life in the context of his culture and value systems in which he/she lives and to achieve their goals, expectations, standards, and concerns (Mir, Wani, & Sankar, 2017).

The current paper utilized the third theory of life quality which states that "the development towards the concept of human needs and existentialism". Fulfillment of needs is the basic requirement of all human beings (Ventegodt *et al.*, 2003).

### **3. Data Source and Location**

Data for the study was obtained from primary sources. This study is quantitative, which commonly involves larger participants would allow a higher degree of generalization of the results. Four hundred females participated in the current study. The female borrowers belong to the District Bahawalpur, Southern Punjab, Pakistan. Southern Punjab is 48.5 percent of the whole Punjab. According to the Report in Pakistan Social and Living Standard Measurement Survey, (2014-2015), the Bahawalpur has the 12<sup>th</sup> most populous city in Pakistan, where 40 percent population is living below the poverty line in which 70 percent survives in the rural area while the rest of the 30 percent lives in the urban area, under the municipality limits.

### **4. Results of Multinomial Logit Model (MNLM)**

Multinomial Logit and Probit regression are used when the dependent variable has more than two categorical outcomes. As this model also has more than two discrete choices, therefore, MNLM is used. MNLM relays the explanatory variables to the discrete choice to worsen the same and improve life quality. MNLM also does not require the assumption of normality, linearity or homoscedasticity.

#### **4.1 Model**

The econometric model given below, explained the impact of microcredit (MC) and the dimensions of aggregate personal empowerment (PEagg) namely, economic decision making (EDM), freedom of movement (FOM) and political socio-cultural awareness (PSA) on aggregate life quality (QOLagg) of female beneficiaries.

$$\ln \frac{\text{pr}(\text{QOL}_{\text{aggi}}=j)}{\text{pr}(\text{QOL}_{\text{aggi}}=m)} = \beta_0 + \beta_1 \text{LD}_i + \beta_2 \text{T}_i + \beta_3 \text{LS}_i + \beta_4 \text{EDM}_i + \beta_5 \text{FOM}_i + \beta_6 \text{PSA}_i + \beta_7 \text{AGE}_i + \beta_8 \text{EDU}_i + \beta_9 \text{FS}_i + \beta_{10} \text{MS}_i + \beta_{11} \text{PAI}_i + e_i$$

#### **4.2 Impact of Microcredit on the composition of Individual Empowerment on Aggregate life Quality**

The current study analyzed the effect of microcredit (LD, T, LS) and dimensions of personal empowerment (EDM, FOM & PSA) on Aggregate Quality of life (QOL) in the model respectively. The multinomial logit model was used to examine the effect of the loan period (LD), amount of loan (LS), training (T), economic decision making (EDM), freedom of movement (FOM), political social awareness (PSA), age (AGE), education (EDU), marital status (MS), family size (FS) and personal annual income (PAI). Later, we also discuss the estimation results of the multinomial probit model to determine whether our results are robust to different estimation multinomial probit models.

#### **4.3 Tests for Model Fit**

**Table 1**  
*Tests for Goodness of Fit*

| <b>Tests</b>                     | <b>Results</b> |
|----------------------------------|----------------|
| Likelihood Ratio $\chi^2$ (6)    | p-value=0.0000 |
| Wald chi-square test             | p-value=0.0000 |
| Pseudo R <sup>2</sup>            | 0.2661         |
| Percentage of Correct Prediction | PCP= 83.75%    |

**Source:** PSLM Survey, 2016, values computed using STATA – 13.

The model's likelihood ratio  $\chi^2$  statistic of 194.54 while the Wald chi-square test statistic of 130.69 both significant at 1 percent significance level (p-value = 0.0000), thus we reject the hypothesis that all parameters are simultaneously equal to zero. It indicates that at least one of the coefficients in the model has an impact on the dependent variable. As indicated in Table 1, the percentage of cases correctly predicted is 83.75 percent.

#### **4.4 Test for Model Specification**

Sooner than, we estimate the model, to check whether the model specification the Independent Irrelevant Alternative (IIA) assumption. The independent irrelevant alternative (IIA) test is often

used to test model specification for the multinomial model. The test is based on the notion that the choice probability of any two alternatives is not affected by the other alternatives. Hausman- McFadden specification test has been used to see if the model meets the independent irrelevant alternative (IIA) assumption. The null hypothesis tested here states that the odds between a pair of alternatives are independent of the remaining alternatives. Based on this, the test compares estimate coefficients of the full model to that of a restricted model in which one of the alternatives is omitted. A significant test is an evidence against  $H_0$ .

**Table 2**  
**Hausman Tests of Independence of Irrelevant Alternatives (IIA) Tests for MNL**

| Full sample    |            |      |    |                    |          |
|----------------|------------|------|----|--------------------|----------|
| Omitted        | Chi-square | Chi- | df | P>chi <sup>2</sup> | Evidence |
| 1 Worsen QOL   | -4.998     |      | 12 | 1.000              | For Ho   |
| 2 Same QOL     | -30.801    |      | 12 | 1.000              | For Ho   |
| 3 Improved QOL | -4.122     |      | 12 | 1.000              | For Ho   |

**Source:** PSLM Survey, 2016, values computed using STATA – 13.

Statistical evidence in Table 2 indicates the chi-square of the “worsen the quality of life” has a negative sign. On the base of the studies of Long & Freese (2006) and McFadden (1984), the negative value of chi-square does not indicate a violation of independent irrelevant alternative (IIA) assumption. Thus, the evidence of all cases 1, 2 and 3 are for Ho and therefore fail to reject the null hypothesis. Therefore, the three outcomes of the dependent variables are distinct, and this justifies the use of the multinomial logit model.

#### **4.5 The effect of Microcredit on the composition of Individual Empowerment on Aggregate life quality**

Model has evaluated the impact of age, education, marital status, family size, personal annual income, loan duration, training, loan size, economic decision making, freedom of movement and political social-cultural awareness on the overall aggregate of life quality of poor female beneficiaries.

**Table 3**  
**Results of Multinomial Logit & Marginal, Odds Ratio and Probit Model Effect Estimation on Quality of Life**

| Dependent Variable | Multinomial Logit model |                |           |                        | Odds Ratio |                 |          |                       | Probit Model      |                 |
|--------------------|-------------------------|----------------|-----------|------------------------|------------|-----------------|----------|-----------------------|-------------------|-----------------|
|                    | Worsen QOL              |                | Same QOL  |                        | Worsen QOL |                 | Same QOL |                       | Worsen to improve | Same to improve |
|                    | Coeff.                  | Marginal       | Coeff.    | Marginal               | Odds       | Z               | Odds     | Z                     | Coeff.            | Coeff.          |
| Cons               | 21.89***                | -              | 12.80***  | -                      | 3.24       | 5.02            | 3651     | 3.86                  | 13.95***          | 7.982***        |
| LD                 | 0.522                   | -0.103**       | 1.546***  | 0.207***               | 1.686      | 0.85            | 4.696*** | 2.91                  | 0.015             | 0.966***        |
| T                  | -0.698**                | -0.001         | -0.759**  | -0.054*                | 0.497**    | -2.07           | 0.467**  | -2.52                 | -0.467*           | -0.471**        |
| LS                 | -                       | -              | -0.756*   | 0.0661                 | 0.160***   | -3.25           | 0.469*   | -1.67                 | -                 | -0.585*         |
| EDM                | 1.829***                | 0.134***       | 1.706***  | 0.127**                | 4.631**    | 2.51            | 5.512*** | 3.26                  | 1.300***          | 0.979***        |
| FOM                | 1.532**                 | -0.001         | -1.233**  | -0.114                 | 0.406      | -1.20           | 0.291**  | -2.32                 | 0.756*            | -0.787*         |
| PSA                | -0.899                  | 0.025          | -1.055*   | 0.174***               | 0.036***   | -4.32           | 0.348*   | -1.88                 | -0.534            | -0.578          |
| AGE                | -                       | -              | -         | -                      | -          | -               | -        | -                     | -                 | -               |
| EDU                | 3.320***                | 0.278***       | 0.704**   | 0.037                  | 2.165**    | 2.08            | 2.022**  | 2.51                  | 1.952***          | 0.412*          |
| FS                 | 0.772**                 | 0.015          | 0.467**   | 0.0837**               | 0.962      | -0.12           | 1.596**  | 2.35                  | 0.489*            | 0.390**         |
| MS                 | -0.378                  | -0.054*        | -0.875**  | 0.007                  | 0.245***   | -2.81           | 0.416**  | -2.50                 | -0.146            | -0.400*         |
| PAI                | 1.405***                | -0.072         | -1.528*** | -0.215***              | 0.654      | -0.83           | 0.216*** | -3.25                 | -0.690**          | -               |
|                    | -                       | 0.112***       | -1.113*** | -0.073**               | 0.336***   | -3.46           | 0.328*** | -4.78                 | -                 | 0.925***        |
| LR $\chi^2$ (22)   | 194.59                  | Log-likelihood | -268.3856 | Number of observations | 400        | Prob > $\chi^2$ | 0.0000   | Pseudo R <sup>2</sup> | 0.2661            |                 |

Source: PSLM Survey, 2016, values computed using STATA – 13.

Note: \*\*\* is significant at (p < 0.01), \*\* is significant at (p < 0.05) and \* is significant at (p < 0.10) level, respectively.

The first and second sub-research objectives of the present scholarship are that microcredit (MC) and the three domains; economic decision making (EDM), freedom of movement (FOM) and political, social-cultural awareness (PSA) of aggregate personal empowerment (PEagg) has an impact on women borrowers' life quality. Thus, the MNLM was used to examine the effect as follows. Later, the study also discussed the estimation results of the marginal effect, odds ratios, and multinomial probit model to determine whether our results are robust to different estimation multinomial probit models. Thus, the results of MNLM regression are offered in Table 3. The table shows the estimate of the model.

#### **4.6 Multinomial Logit Estimates**

The current study analyzed the effect of microcredit (LD, T, LS) and dimensions of personal empowerment (EDM, FOM & PSA) on the aggregate of life quality. The MNLM was used to examine the effect of loan duration, training, loan size, economic decision making, and freedom of movement, political socio-cultural awareness, age, education, marital status, family size and personal annual income on the aggregate of quality of life. Later, we also discuss the estimation results to determine whether our results are robust to different estimation multinomial probit models.

Thus, this study found sufficient evidence that there exists no relation between personal annual income (PAI) and women's quality of life. Therefore, the alternative hypothesis proposed there is a relationship between personal annual income (PAI) and female life quality in support of the third theory of Life quality. The finding of the present study is supported by many previous types of research such as Azid, Ejaz and Alamas (2010); Ali, Ali, and Subhan (2015).

#### **4.7 The Marginal Effect Estimates**

As mentioned above in detail in previous model 1; marginal effects are harmonizing to the MNLM regression approximations as it recounts the influence of every independent variable on the foretold consequence likelihoods. For multi-category variables, the change impact discloses the alteration in predicting likelihoods for every contrast group comparative to the base group (Cameron & Trivedi, 2009). Thus, the change impact of model 2 is as follows. So, in the marginal effects the variables loan period (LD), loan amount (LS), training (T), economic decision making (EDM), political socio-cultural awareness (PSA), education (EDU), marital status (MS) and personal annual income (PAI) found to be significant while freedom of



movement (FOM), age (AGE) and family size (FS), were insignificant correspondingly.

#### **4.8 Odds Ratio Estimates**

Odds are the ratio of the probability of an event occurring to the probability of the event not occurring (Gujarati, 2004). An odds ratio greater than 1 corresponds to a positive logit coefficient while the odds ratio of less than one corresponds to a negative Logit coefficient.

#### **4.9 Multinomial Probit Model Estimates**

The robustness is necessary to measure the important conclusions model. Therefore, it is probable that these findings would remain the same even when the variables are exposed to diverse specifications of the model. To verify the robustness of these results MNPM which showed statistical significance at probability  $> \chi^2 = 0.0000$ .

Hence, in conclusion, it is evident from the above-mentioned Logit results that microcredit which is measured by the period of the loan, amount of loan and training are found to be significant in explaining the quality of life of the women borrowers of Pakistan. Moreover, demographic variables have a significant relationship with life quality.

The current study revealed a significant impact of microcredit availability upon the composition of the life quality of female borrowers. Therefore, it is clear that to improve the life of female borrowers of Pakistan it should not be focused only on microcredit, but dimensions of personal empowerment must be coming together with microcredit. Dimensions of personal empowerment lead to the personal growth of women borrowers of Pakistan that will further affect the quality of life. So, it is evident from the result of the study that not only microcredit played an important role in improving quality of life, but dimensions of personal empowerment have also an important determinant of quality of life.

### **5. Conclusion**

The second null hypothesis is that the life quality is not influenced by microcredit on personal empowerment i.e. economic decision making (EDM), freedom of movement (FOM) and political socio-cultural awareness (PSA). The results of the study showed that the coefficients of loan duration (LD), economic decision making (EDM), age (AGE) and education (EDU) is positive and significant at

1 percent. It depicted that all the above-mentioned variables positively affect worsen and same life quality which shows a decrease in improve quality of life.

Contrarily, coefficients of loan size (LS), training (T), freedom of movement (FOM), political socio-cultural awareness (PSA), size of the family (FS), the status of marriage (MS) and individual yearly income (PAI) are inverse and important at 1, 5 and 10 % respectively, representing a decrease in worsening and same life quality but increase in improved life quality of women borrowers in Pakistan. In a nutshell, the finding of this study is also based on the earlier theory quality of life III and empirical studies reviewed, and therefore conclude that microcredit and dimensions of personal empowerment do affect women borrowers' quality of life. This study, however, rejects the null hypothesis that microcredit and dimensions of personal empowerment do not affect women borrowers' quality of life.

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